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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/917,880 | 07/31/2001 | Teruji Ikematsu | Q64673 | 2071 |

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EXAMINER

NGHIEM, MICHAEL P

| ART UNIT | PAPER NUMBER |
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2863

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,880

Applicant(s)

IKEMATSU, TERUJI

Examiner

Michael P Nghiem

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-11, 15, 16 and 19 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 13, 14 and 17 is/are rejected.
- 7) ☒ Claim(s) 3-6, 12 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Amendment filed on April 5, 2004 has been acknowledged.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 13, 14, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Eshed (US 6,115,056).

Eshed discloses all the claimed features of the invention including:

- a method and apparatus for controlling exposure (Fig. 1), wherein a recording medium (14) is irradiated with a light beam emitted from a light source (22's, 32) which is moved along one (2) of main scanning (2) and sub-scanning directions (16) by a light source scanning apparatus (housing of 12), the recording medium being moved along the other

(16) of the main scanning and the sub-scanning directions (Fig. 1), to scan-expose the recording medium (Fig. 1), the method comprising:

- obtaining distance correction data (changes in distance data, column 1, line 62) from which is generated by measuring distance between the recording medium and the light source (autofocusing apparatus 12 compensates changes in distance, column 1, lines 60-64) while the light source is being moved by the light source scanning apparatus (Fig. 1);

- performing distance correction processing (column 1, line 64), in which during scan-exposing of the recording medium, the light source is moved toward and away from the recording medium (column 1, lines 64-67) synchronously with the movement of the light source by the light source scanning apparatus based on the distance correction data (column 1, lines 60-67, Fig. 1);

- obtaining light-emission correction data which is generated by measuring a position irradiated with the light beam emitted from the light source onto the recording medium while the light source is being moved by the light source scanning apparatus (column 1, lines 60-67);

- performing light-emission correction processing, wherein, during scan-exposing of the recording medium, light-emission of the light source is controlled synchronously with the movement of the light source by the light source scanning apparatus based on the light-emission correction data (column 1, lines 64-67);

- a distance correction data memory which stores distance correction data (memory in 12 for storing compensation data);

- a movement controlling apparatus (Fig. 1), which, during the scan-exposing of the recording medium, operates the light source moving apparatus on the basis of the distance correction data which has been stored in the distance correction data memory, synchronously with the movement of the light source by the light source scanning apparatus (column 1, lines 29-37);

- a light-emission correction data memory, which stores light emission correction data (memory in 12 for storing data to correct lens 32).

Allowable Subject Matter

2. Claims 3-6, 12, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. Claims 7-11, 15, 16, and 19 are allowed.

Reasons For Allowance

4. The combination or method as claimed wherein reading the distance correction data for one step immediately before exposure, the one step being a predetermined amount by which the light source is moved for exposure by the light source scanning apparatus (claims 3, 5, 18) or obtaining light-emission correction data

which is generated by measuring a position irradiated with the light beam emitted from the light source onto the recording medium while the light source is being moved by the light source scanning apparatus (claims 7, 15) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

5. Applicant's arguments filed on April 5, 2004 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 rejections, Applicants argue that the distance of a drum to a light source is not accounted for, and movement of a light source is not disclosed by Eshed.

Examiner's position is that Eshed discloses that the distance of a drum to a light source (light emitting end 26 of 22's) changes (column 1, lines 62-64). Further, diodes (22's) move with the movable apparatus (12) in direction (2) (Fig. 1).

Applicants further argue that the focus apparatus (12) of Eshed does not inherently include a memory as described by claims 13 and 17. The focus of apparatus (12) can be achieved in the absence of stored data, such as real-time measurement and correction.

Examiner's position is that Eshed discloses that "an autofocus mechanism is designed to compensate for changes in the distance between the surface of the printing member and the aligned light emitting end 26 of the fiber optics 24A-24E" (column1, lines 61-63). In order for the autofocus mechanism to compensate for changes in the distance, a memory is likely required to store the compensation data. This way, the mechanism can "remember" what compensation was performed previously before making new compensations. Further, a memory would be required to store any predetermined value, e.g. predetermined distance. The predetermined distance data may be construed as part of the data required to correct the position of lens (32).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

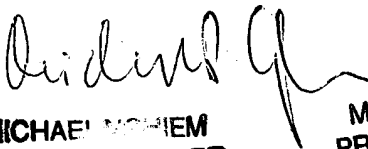
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2272. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (571) 272-2269. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

April 23, 2004